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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,010	09/25/2006	Hiroyuki Kinoshita	0033-1104PUS1	6191
2292 7590 06/10/2010 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER HOBAN, MATTHEW E				
ART UNIT		PAPER NUMBER		
1793				
NOTIFICATION DATE		DELIVERY MODE		
06/10/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/594,010

Applicant(s)

KINOSHITA ET AL.

Examiner

Matthew E. Hoban

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2010.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-51 is/are pending in the application.
4a) Of the above claim(s) 24-43 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 44-51 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SI/226)
Paper No(s)/Mail Date See Continuation Sheet
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :9/24/2006
12/26/2006 11/20/2007 12/01/2008.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 44-51 in the reply filed on 3/24/2010 is acknowledged.

Claim 24-43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 3/24/2010.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 44-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "light emitting diode" in claim 44 is used by the claim to mean "a

light emitting device having both a diode and a phosphor layer", while the accepted meaning is "a structure emitting light based on the recombination of electrons and holes in the depletion layer of a p-n junction" (See References 1 and 2 below). Applicant includes a phosphor layer of SiC in the light emitting diode. It is unclear how this phosphor is a part of the actual diode as a phosphor is phosphorescent, wherein phosphorescence is typically defined as the excitation of electrons from the valence band to the conduction band of a material by a charged particle, photon, or phonon. The excited electron then typically moves to an intermediate state before falling back to the valence band, emitting light in the process. Thereafter, applicant defines the diode, a functionally limited material, as including a secondary material not having functionality as a diode in any regard. This characterization of a diode is repugnant to the art accepted definition. Thereafter, based on the inclusion of a phosphor as part of a diode, it is unclear how the nitride semiconductor device and SiC phosphor are related. It is believed that applicant seeks a patent on a device including both a phosphor and diode; however, a call made to applicant's representatives led to no resolution concerning this contention making any meaningful consideration in light of the prior art impossible. If applicant wishes to seek a device including a diode with a conversion layer including a phosphor it is believed that such a change could be made without introducing new matter.

Art related definitions and descriptions of both diodes and phosphors are included with this correspondence and include:

Diodes:

1. Held. Introduction to Light Emitting Diode Technology and Applications. Auerbach Publications. Boca Raton FL 2009. Pages 10-11.
2. Leigh. *Light Emitting Diodes*. Devices for optoelectronics. Marcel Dekker, Inc. NYC 1996. Pages 41-42.

Phosphors:

3. Yen et al. *Terminology*. Phosphor Handbook 2nd Edition. CRC Press. Boca Raton FL 2007. Pages 3 and 4.
4. Lakshmana. *Fluorescence and Phosphorescence*. Luminescence and Display Phosphors: Phenomena and Applications. Nova Science Publishers, Inc. New York 2007. Pg 9.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Hoban whose telephone number is (571) 270-3585. The examiner can normally be reached on Monday - Friday from 7:30 AM to 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. Melissa Koslow/
Primary Examiner, Art Unit 1793

/Matthew E Hoban/
Examiner, Art Unit 1793